

# Government guarantees and banks' earnings management

## Two experiments:

### 1. Landesbanken setting

- a. Removed explicit guarantees for a small set of German banks
- b. Prediction:
  - i. Proposition: Earnings smoothing increases
  - ii. Testable hypothesis: Sensitivity of LLP to EBLLP should increase

### 2. Eurozone setting

- a. Provided implicit guarantees for banks in 11 countries
- b. Prediction:
  - i. Proposition: Earnings smoothing decreases
  - ii. Testable hypothesis: Sensitivity of LLP to EBLLP should decrease

Use pre-post testing and D-I-D analysis (pre-post with control groups) in both settings.

# Comment #1: Practicalities of “smoothing” with the LLP

Theory: Step 1) In periods of “high” or sufficiently high earnings, create hidden/cookie jar reserves.  
Step 2) In subsequent periods of low earnings, reverse out excess (or do not accumulate)

=> smoother process viewed as more stable, which is more important when there no guarantees

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Issues with Smoothing of LLPs measured by sensitivity of annual LLP to annual EBLLP:

1) Other incentives (e.g., capital requirements, compensation) which make creating “excess” LLPs unappealing

2) Creation and reversal are not viewed equally by auditors/regulators (?)

\* Do regulators care if banks are over-reserved in good times? They do care that they are adequately reserved in bad.

=> Creation of reserve has to come before reversal (good times have to come before bad)

3) Excess is bounded...so sequence of good and bad times matters.

\* Measure of smoothing is sensitivity of annual LLP to annual EBLLP.

\* What if 4 good years in a row, then 4 bad years in a row?

\* First good year, maybe second -- the regression coefficient reflects smoothing. Year 3? Year 4?

\* First bad year -- the regression coefficient reflects smoothing. What if first bad year is really bad? Year 2? Year 3? Year 4?

# LIBOR



Post periods in Landesbanken and Eurozone tests

# EURO-DOLLAR EXCHANGE RATE



## Landesbanken:

State-owned (lacking capital market incentives)

Difficult to find a reasonable control group

Poor data to control for changes in risk-taking in the loan portfolio

Post period = financial crisis

Concurrent event: IFRS – they say many adopted early, but they better be careful because the statement that matters is IAS 39, which came out in Dec 1998, and if banks adopted early then that is the post period of the Eurozone analysis.

# Eurozone:

Extensive confounding events issues

Various control samples and placebo tests, but:

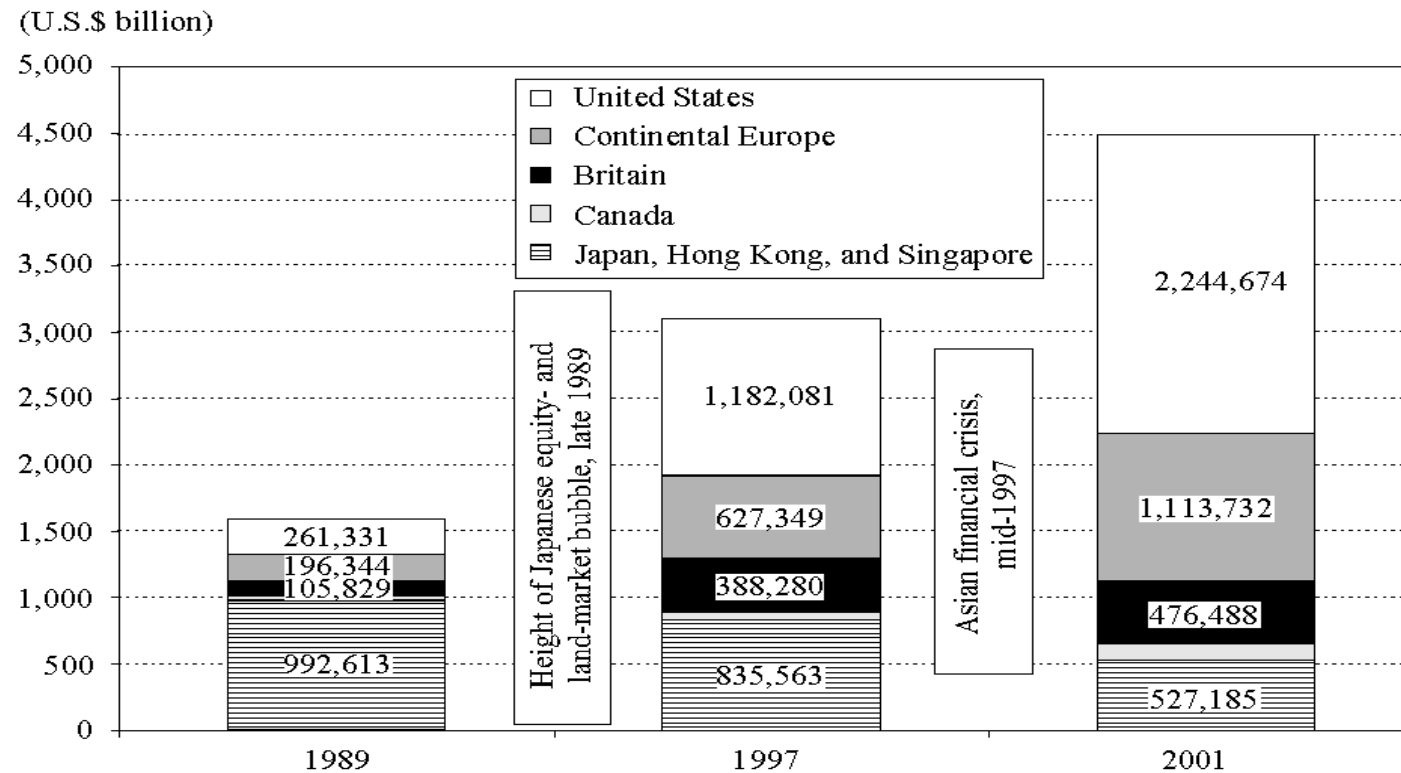
- No stats to assess matching (especially for PSM)
- No rigorous tests of parallel trends
- No fully interacted model
- Yes, fixed effects (year, bank-type, country) BUT unbalanced panel

# Merger wave late 1990s in European banks

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THE DEVELOPING ECONOMIES

Fig. 3. Market Value of Financial Firms Listed in *Business Week's* "Global 1000," Classified by Global Areas, 1989–2001



Dymski, 2002

# Suggestions:

- 1) A more contextual analysis of the LLP and charge-off behavior (possibilities for smoothing) as in Liu and Ryan ... over the business cycles that surrounded the two events.
- 2) Better controls for changes in risk-taking
  - 1) Especially in Landesbanken analysis???
  - 2) Fully interacted model
- 3) Add cross-sectional analysis in the Eurozone setting



# Creditor rights and bank losses: A cross-country comparison

Examine effects of four specific creditor rights (but really two) on risk in lending.

What they say (p. 7):

- 1) Theory and empirics separating effect of *Reorg* and *Secured* on risk in lending
- 2) Intertemporal differences in effect
- 3) Separately measure “Probability of default” and “loss given default” and effect of each creditor rights measure on each
- 4) Distinction between *Secured* and *Reorg* raises questions about using an index.

# QS vs. HLLM in more detail

p. 4/5      “Our results directly call into question HLLM’s conclusion...”  
“When creditor rights are stronger, we find ...the loan portfolio is both cheaper and safer”

Next para: “When the secured creditor is paid first, banks had increased risk within the loan portfolio only during the pre-crisis periods.”

Next para: “Our findings show that, in pre-crisis years, the increased worldwide lending risk was specifically driven by a high value of *Secured*.”

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Houston, Lin, Lin, and Ma (JFE, 2010)      -----→ More risk-taking  
69 countries, 2000-2007 (primary tests)

Qian and Strahan (JF, 2007)      -----→ Cheaper debt  
syndicated loans (only), 43 countries, 1994-2003

Heitz and Narayanamurthy contradict HLLM but confirm QS  
\* larger and broader set of loans contracts  
\* creditor rights measure improvement?  
\* 97 countries, 2005-2014

# Secured, Reorg and “Creditor rights”

Table 1, Panel D: Country-Level variables

	Mean	SD	25%	Median	75%	N
Crighs	2.0412	1.0500	1	2	3	97
Reorg	0.3711	0.4856	0	0	1	97
No Autostay	0.4536	0.5004	0	0	1	97
Secured	0.6907	0.4646	0	1	1	97
Manages	0.5258	0.5019	0	1	1	97
English	0.3093	0.4646	0	0	1	97
French	0.4124	0.4948	0	0	1	97
German	0.1546	0.3634	0	0	0	97
Scandinavian	0.0412	0.1999	0	0	0	97
Socialist	0.0825	0.2765	0	0	0	97

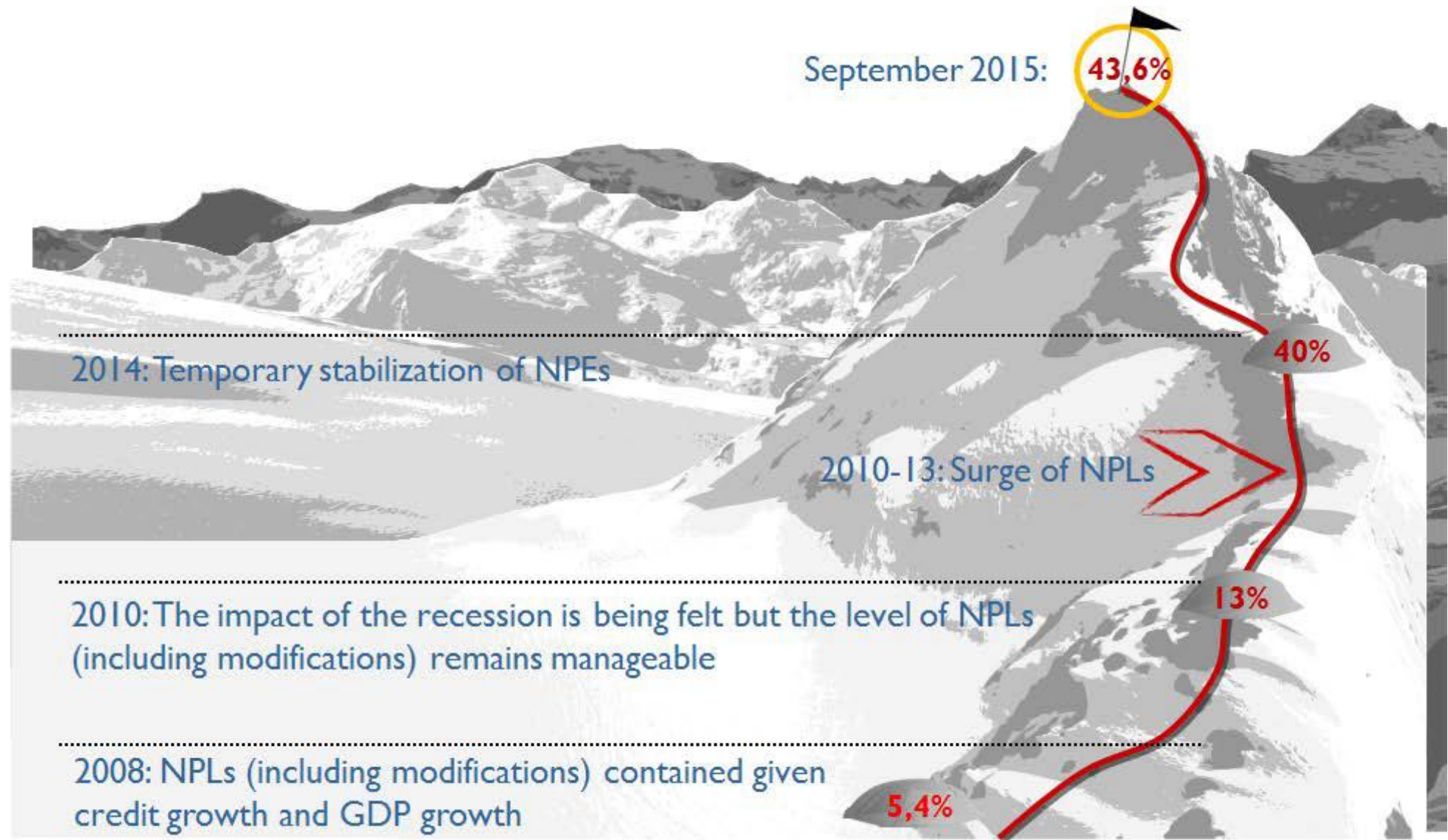
# Table 17 – detailed country-level data

Excerpts from Table 17						
	Reorg	No autostay	Secured	Manages	# Countries	# Banks
1	0	0	1	0	13	274
1	1	0	0	0	3	25
2	1	0	1	0	0	0

Source of identification  
for Reorg results...

Greece (15)  
Hungary (7)  
Rwanda (3)

Canada (37), Costa Rica (10), Finland (3), Guatemala (4), Ireland (6), Pakistan (23),  
Papua New Guinea (1), Philippines (24), Portugal (87), Sweden (68), Switzerland (3), US (5656),  
Vietnam (8)



# Robustness

Employ legal origin as an instrument for creditor rights

Results are robust – but is that good?

# Suggestions

- 1) Cross-sectional predictions (considering that LLP might be manipulated)
- 2) Replicate HLLM and QS...turn one dial at a time.
  - \* Not: Call into question HLLM and confirm QS for a broader sample of loans...
  - \* The crisis changed “stuff” – what happened?